THE VOICE OF THE BOY

A NEW CONCEPTION OF ITS NATURE AND NEEDS IN DEVELOPMENT AND USE, AND OF ITS RELATION TO THE ADULT MALE VOICE

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BIBLIOGRAPHY.

THE CHILD'S VOICE. Emil Behnke and Lennox Browne, F.R.C.S., Ed. John Curwen & Sons, London.

TRAINING OF CHOIR BOYS. C. Edward Stubbs, M.A. Novello, Ewer & Co., New York and London.

THE BOY'S VOICE. J. Spencer Curwen, F.R.A.M. John Curwen & Sons, London.

HOW TO TRAIN CHILDREN'S VOICES. T. Maskell Hardy. John Curwen & Sons, London.

THE CHILD VOICE IN SINGING. Francis E. Howard. Novello, Ewer & Co., London and New York.

HYGIENE OF THE VOCAL ORGANS. Sir Morell Mackenzie, M.D., Edgar S. Werner, New York.

THE ART OF TRAINING CHOIR BOYS. Sir George C. Martin, Mus. Doc. Novello, Ewer & Co., London and New York.

THE BOY'S VOICE AT THE BREAKING PERIOD. E. Davidson Palmer, Mus. Bac. Joseph Williams, London.

MUSIC IN ITS RELATION TO THE INTELLECT AND THE EMOTIONS. Sir John Stainer, M.A., Mus. Doc. Novello, Ewer & Co., London and New York.

LUNG CULTURE. P. von Boeckmann, New York.

THE SPEAKING VOICE. Mrs. Emil Behnke. E. S. Werner, New York.

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THE VOICE OF THE BOY.

Introduction.

THE object of this little work is to discuss the methods of training and the form of development as applied to the male voice, beginning with the boy and extending over the period of change into manhood. The author in presenting this new conception of the boy's voice is fully aware that he is attacking a system "as old as the hills," but is also aware that he is amply supported by reason and experience.

The boy is endowed at birth with a voice that contains wonderful possibilities but subtle complications. So complicated is it that even to-day, after the lapse of centuries, it is misunderstood, neglected, and abused. Comparatively little has been written concerning the boy's voice, and most of the existing publications have appeared within the last twenty years. These publications, however, do not help us much in our study, as they are written from a different standpoint—i.e., they assume the necessity of the "break" at puberty, which this work *positively denies.** They

* Since this matter was prepared the author has received a pamphlet entitled "The Boy's Voice at the Breaking Period," by Davidson Palmer, Mus. Bac. Jos. Williams, London.

contain interesting discussions concerning (1) the use of the thin or thick registers; (2) singing or rest during the change of voice; and (3) the prospect of singing boys becoming singing men. The writers are physicians, voice trainers, choir directors, and school music instructors. The consensus of opinion is in favor of the thin register rather than the thick; that boys should not sing during the change of voice; and that few boys who have sung much are able to sing well as men. There is an evident desire to overcome the difficulties and deficiencies of boy singing, but the principal point is entirely missed—i.e., the kind of change the voice should undergo. It is believed that this important question is now and herein satisfactorily settled; all other matters concerning the boy's voice are insignificant and dependent upon this.

Most boys' voices grow wild like common weeds, many receive a pseudo training in schools, and some are specially trained for singing; but all alike come to the point when the voice changes from the voice of youth to that of manhood. How should the voice change? The following pages answer this question.

The author has earnestly striven to convey his ideas to the public in a direct and simple manner, avoiding technical terms, and irrelevant and unprofitable discussions under the several topics. He has, therefore, omitted long references to, or quotations from, other writers, which at best would only have served to make the work more bulky without adding to its power to convince, and has contented himself by adding a bibliography which may be referred to by those seeking further information concerning the boy's voice.

This is a live subject, directly affecting millions of the human race of every creed and color, and the

author hopes to have a full and frank discussion, so that the boy's voice may cease to be a subject for ridicule, and that the methods of training and using it may become firmly fixed upon a scientific basis.

CHAPTER I.

The Present Status of the Boy's Voice.

THE boy's voice is used in singing in the day school, in the Sunday-school, and in the church (boy) choir. Nearly all the singing taken part in by boys is in one of these ways.

Little attention is paid to voice training and correct voice use in the day school. Teachers have little time and, perhaps, less skill in this line of work. If the boy sings it is largely a matter of accident; but if he sings well it is cause for much congratulation. Comparatively few boys sing, and the majority of those who do sing, sing badly. Teachers are usually satisfied if they get plenty of sound; they do not often find fault with the quality of the voices. Many teachers believe that time spent in trying to teach boys to sing is wasted. Under present conditions this can hardly be denied. In consequence, good boy singers are scarce and good day-school singing is rare.

In the Sunday-school even worse conditions exist. There is no vocal training whatever, and hearty, robust singing is sought. Here the tender voices of children of four and five years of age are used with the comparatively developed voices of young men and women of eighteen to twenty, to the serious danger of the former. Hard, harsh voice quality is all too common and the singing is unsatisfactory, both as to quality and quantity of tone.

In the church (boy) choir the conditions are much more favorable at the beginning of the boy's term of service, as he is usually compelled by an expert to sing in his thin register, or head voice, in similar manner to the girl. The choirmaster often succeeds in getting good results from boys, because he selects his material, teaches a small number, frequently gives individual instruction, and pays for their services. The conditions favor very much better results than are usually obtained. The advantage to the boy, however, is only in the early part of his term of service in the choir. The disadvantage of the latter part much more than counterbalances the previous advantage. The choirmaster—in all faithfulness and with unfailing belief in the traditions of his profession, and in the authoritative dictum of his predecessors—continues to train the boy's voice high in pitch even after the hereditary conditions or tendencies peculiar to the boy have begun to produce a change in him, calling for a corresponding change in his vocal habits. This error of the choirmaster is a costly one for himself, and often fatal to the boy's voice.

When the boy reaches fourteen to fifteen years of age, his voice fails—breaks—and he cannot use it any longer in singing; even speaking is often a trial to him. This change of voice comes whether he is a singer or not. Nature herself orders and provides a method of change, but unfortunately nature is not strong enough to enforce her order. Usage and neglect combine against her, and she is powerless to carry out her complete arrangements in her own way. This precipitates a struggle—a violent struggle; nature on the one hand, old habit on the other. Old habit effectually prevents the voice from changing in a

natural way by postponing the change as long as possible. The change does take place—nature does assert herself ultimately, but not until the voice has broken. The longer he uses his voice high in pitch, the more strain he puts upon the delicate muscles, the more defective it becomes physically; nor can he expect to overcome this condition in manhood, as the same throat, the same cords, the same muscles are to be used in the adult voice, in all likelihood guided by the same bad habits. The "break" means that the voice has really collapsed; has become a mass of débris —broken down, ruined, destroyed, for all but the most ordinary purposes. The throat becomes congested and apparently diseased. This congestion is caused not by the general physical change in the boy directly, as many authorities claim, but by the strain put upon the vocal apparatus in using the voice higher in pitch than is natural. Nor does the result of the strain go away when the congestion goes away. It can never be overcome. So great has the strain been that in trying to use the voice the larynx flies about in the most fantastic manner, so affecting the pitch that consecutive words in his conversation may be heard even an octave apart. He has no control over his voice; it actually defies him. The only wonder is that any voice at all survives this dreadful condition. He has actually been using his voice for several years at one fifth to one octave above its natural pitch as well as laboring under defective methods of production.

This "break" in the voice is considered to be perfectly natural because nearly all boys suffer from it, and, so far as we know, it is the immemorial habit of voice change. That the boy's voice must change to

the man's voice is as certain as that the boy changes to the man, but the author asserts and hopes to prove that this is not the natural mode of transition; that it is unnecessary and barbarous. Yet in one sense the "break" in the voice is natural, inasmuch as it arises from the boy's habit of using his voice. Abuse of the voice and the break are related as cause and effect.

The term "voice building" used by some voice trainers is an eloquent reminder of the actual condition. The voice requires to be rebuilt after breaking, but the great misfortune is that the builder cannot use new materials in the process. Nature is imperative on this point. "These organs have been given to you once and they cannot be replaced," she says in effect. Satisfactory voice building cannot be done under these conditions. A good voice cannot be developed if the vocal materials are defective, and strained vocal muscles cannot by any stretch of imagination be anything else than defective.

But the singing voice is only one form of voice use, and general opinion perhaps would call it much less important than speaking. As a matter of utility it is, but from the standpoint of culture they are about equal. Both speaking and singing employ the emotional and intellectual faculties. Speaking emphasizes the intellectual side—reason, thought, and to a smaller extent, feeling. Singing emphasizes the emotional side—feeling, and to a smaller extent, reason and thought.

The boy's speaking voice is almost universally abused. His intellectual and emotional nature seems to be dormant as far as the voice is concerned; and instead of using it as a member of the human family, the highest attribute of which is spirituality, he uses it in

an entirely physical manner, giving preference to strength and coarseness over sweetness and smoothness.

This might be of small consequence except for the fact that the kind of voice is the resultant of certain emotional, intellectual, and physical attributes of the boy—in a word, it reflects his character. More than this, the voice influences the character, and the character in turn affects the voice. It would surely be a wise provision if parents would insist on voice training as an aid to character training. Voice training is a process of vocal refinement which has far-reaching consequences on thought, feeling, and action.

Whether we consider the boy in his singing relations to the day school, the Sunday-school, or the boy choir, or whether we consider him as a non-singer, either in use of the voice or method of training, or both together, he is alike unfortunate, misunderstood, and neglected vocally. The result of this misunderstanding and neglect is of far-reaching importance. Not only is the boy himself restricted in the use and enjoyment and general benefits of singing, but the vigor and beauty of the adult male voice depend upon the proper use of the boy's voice. The dearth of adult male singers at the present time, especially tenors, is due almost entirely to the fact that the male voice is worn out in boyhood. Surely it is no exaggeration to say that the present system of training and using the boy's voice is a total failure.

CHAPTER II.

Nature of the Boy's Voice.

THE boy's voice is a complicated affair—much more complicated than the girl's voice. It has a dual aspect and nature—it is first a boy's voice, then after a few years it becomes a man's voice, but it is a male voice all the time. In boyhood it closely resembles a girl's voice in its physical aspect. But the boy's physical nature contains hereditary conditions and tendencies altogether foreign to the girl's nature, which produce important effects upon the voice. The transition from boyhood to manhood includes this important change, from light treble of early boyhood to flowing tenor or lusty bass of manhood. This change of physical condition is a slow process, requiring years to accomplish. The boy's physical nature develops gradually, notwithstanding the fact that the change appears to come suddenly. His larynx, throat, mouth, chest, and breathing capacity all grow gradually, month by month, and year by year, as he approaches the age of puberty, until the physical conditions are those of manhood. With manhood comes the deeper, more vital voice of maturity. Just why this radical change takes place physiologists have not yet determined. It is sufficient for us, however, that this change takes place in every boy who reaches manhood.

Unfortunately the term "boy's voice," though perfectly correct in itself, has served to accentuate the difference between the adult and juvenile male voices —to emphasize and perpetuate the gulf that has come between them. The boy's voice has been trained and used as an end in itself, while as a matter of fact the boy's voice and the man's voice are not absolutely distinct voices, having little or no relation to one another; they are instead two sections of the complete male voice, and are related to each other as is the man related to the boy. The boy's voice is father to the man's voice just as much as the boy is father to the man. If the boy be deformed the man can be nothing else unless by a miracle; the same can be said with even greater certainty of the voice. The size and range of the voice are determined by the size of the vocal organs—the larger they are the deeper and heavier the voice, and the smaller they are the higher and lighter the voice. Basses have the largest larynxes and sopranos the smallest. The boy's vocal organs are much smaller than the man's, therefore his voice is higher and lighter. As has already been remarked, it resembles the voice of the girl. It should therefore be trained and used in the same way. From the age of twelve to seventeen the latter is in a static condition as relates to pitch, and the former is in a variable condition at that age. The boy is growing towards manhood and his vocal organs are developing at the same time, keeping pace with his physical growth. This gradual growth of the vocal parts properly suggests the gradual descent of the voice in pitch.

To assist the general reader, who has usually a vague idea of the mechanism and operation of the vocal organs, to a better understanding of this subject, a

simple yet concise statement of the mechanism of the voice and of tone production is here included.*

There are three parts to the vocal mechanism: (1) the lungs, where the air, the motive power of vocal tone, is stored; (2) the larynx, containing the vocal cords, situated in the throat, where the tone is produced; and (3) the resonator—the mouth, nasal cavities, and head spaces—where the tone is reinforced, and by which it receives its characteristic timbre or quality.

The air in the lungs is put in charge of the respiratory muscles—the diaphragmatic muscle below, the clavicular muscles above, and the intercostals at the sides. By correct muscular action the breath is delivered upon the vocal cords already prepared to receive it. This breath stroke sets the cords into a state of vibration and vocal sound is the result. The original sound, having passed into the upper part of the throat, the mouth and the nasal cavities, is resonated or reinforced and sent on its mission in speech or song.

These various organs are subject to the will of the speaker or singer. Singing is primarily a physical act which is chiefly manifested in breath control, and breath control is a muscular operation. The various pitches and inflections of the voice are the result of modifications and rearrangements of muscular effort guided by the mind.

The adult male vocal organs differ from the juvenile in size and strength. The boy's voice is naturally high in pitch and light in volume, while the man's voice is

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* Those who wish a more extended explanation are referred to "The Mechanism of the Human Voice," by Emil Behnke (J. Curwen & Sons, London), or to "Hygiene of the Vocal Organs," by Sir Morell Mackenzie, M.D. E. S. Werner, New York.

low in pitch and heavy in volume—comparatively. The Voice Chart will help to show this. The first pillar shows the full male voice, from the high C of the boy to the low C of the man; approximate ranges are used advisedly. The second pillar shows the boy's section of the male voice; the third shows the tenor voice, and the fourth the bass voice. On examination of the second and third pillars, it will be seen that the two sections overlap—the lower tones of the boy reach over an octave lower than the upper tones of the man. Emil Behnke conclusively proved by his laryngoscopic investigations that the thin register of the boy and that of the woman are the same as the thin register of the man, and that therefore, the lower tones of the boy may be identical with the upper tones of the man.*

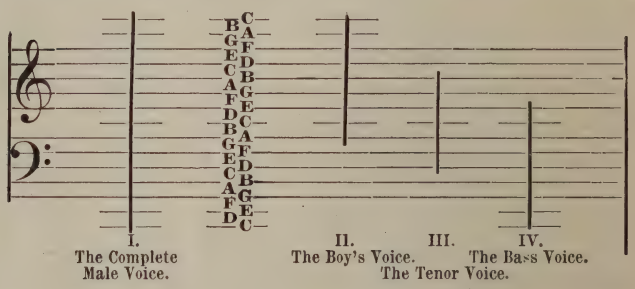

Fig. 1 is not shown here to suggest that any individual male voice should possess that extensive range. The complete male voice is impossible in boys and almost unknown among men, and even when found it has only a scientific value tending to prove the unity of the male voice.

The vocal registers have been referred to above. "A

* See "Mechanism of the Human Voice." Behnke.

register consists of a series of tones which are produced by the same mechanism." * There are three principal registers in the human voice: "1. During the lowest series of tones the vocal ligaments (cords) vibrate in their entire thickness. 2. During the next series of tones the vocal ligaments vibrate only with their thin inner edges. 3. During the highest series of tones a portion of the vocal chink is firmly closed, and only a small part of the vocal ligaments vibrates." *

These registers are named (1) the thick register; (2) the thin register; and (3) the small register. The thick is divided into lower and upper, and the thin into lower and upper. These are clearly indicated in the diagram. The thick register is identical with the chest voice and the thin register with the head voice. The former names are used as being scientifically correct, while the latter do not convey a correct idea of vocal mechanism or tone production.

The singing voice and the speaking voice are physically the same; the apparent difference in the result is obtained by management only. Every normal boy possesses the elements of the singing voice, and if he does not sing it is because he does not try in the correct way. "No ear" and "no voice" are out of date; instead we should use the terms disinclination and lack of training. It is perfectly true that some show more natural aptitude than others, but this is also true of all subjects, and only makes training the more necessary.

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* See "Mechanism of the Human Voice." Behnke.

CHAPTER III.

Obstacles in the Boy's Path.

THE boy who would learn to sing encounters several serious obstacles. For instance, his nature being rougher, sterner, stronger than the girl's, he, at a very early age, misuses his voice. He shouts, laughs, and talks loudly, and somewhat low in pitch—just low enough to strain the vocal muscles by using the thick register instead of the thin. He unconsciously establishes a condition of throat stiffness which he rarely overcomes. He even tries to make his voice unlike the girl's voice because he is a boy.

The average boy uses his voice in this violent manner habitually. The habit comes to him when very young and grows upon him imperceptibly until it has become his master. This bad voice habit usually continues until the break of the voice—it is indeed the cause of the break. By the time he has reached eight to nine years of age, if he is a robust ordinary boy, his throat muscles have become so tight he cannot sing. He feels he cannot. He says there is something in his throat; he cannot tell what. The fact is, he has acquired a habit of muscular strain and tension resulting in stiffness and lack of flexibility. It has come upon him so gradually that it seems quite natural. It is really a disordered muscular condition due entirely to the abuse of the voice. One of the principal condi-

tions of singing, whether in men, women, girls, or boys, is a loose throat with easy muscular action. This the boy does not possess. His condition is the very opposite. This obstacle is almost universal among boys.

Again, a very large number of children, even very young children, breathe improperly. The author has observed for several years that almost all the children who come to school unable to sing breathe defectively, i.e., in the upper part of the lungs and not at all in the lower part; and also that breathing exercises given to a willing subject who heartily seconds the efforts of the teacher almost always remove the obstacle and permit the pupil to sing. This is also a muscular trouble, but the disorder lies in the respiratory muscles. Notwithstanding this, the two are closely related, as defective breathing causes defective throat action, thus supplementing the other trouble. Physically considered, singing is a muscular exercise. If the muscles of the throat are improperly used, good singing is out of the question. If the respiratory muscles be improperly used, good singing is impossible.

The obstacles so far mentioned are internal troubles; the next is an external trouble, and its name is Ridicule. There is no more effective hindrance to boy singing than ridicule. The ridicule of strangers is bad enough, but that of parents and other home intimates acts as a most effective obstacle to vocal effort. It may be admitted here that under the prevailing system the ordinary boy takes to singing as he takes to disagreeable medicine; he certainly does succeed in cutting a ridiculous figure in the operation. When this subject is better understood by parents and children, ridicule will cease to be the important factor it now is, and the boy's voice will be no longer an object

of derision. These are real, live obstacles, and very few boys struggle successfully against them.

The fact is, the boy plays at seesaw with his voice. Almost all his waking time outside of school is employed in unconsciously building up bad habits of voice use, and then in school he is taught and helped to overcome them. The limited training and almost unlimited abuse go on side by side all through his school days. Can we wonder, then, that boys as a class do not sing, and that a good boy singer is regarded as a marvelous product?

CHAPTER IV.

On Vocal Training.

As has been remarked in a previous chapter, singing is physically a matter of muscular habit. The change from the voice of boyhood to that of manhood is largely a change in muscular habits. Habits are often easy to cultivate but hard to overcome. This is particularly true of the voice, which is in daily use for so many years previous to the time of change. Having this in mind, few will be surprised to find SYSTEMATIC TRAINING recommended to cultivate the boy's voice for present use and to aid nature to overcome the old habit and establish the new. The vocal habit of years cannot be changed simply by taking thought. It requires work, years of work. In fact, the work should be begun early and continued persistently until the voice is safely over the change. The boy, thoughtless as he is, cannot do it alone; he must be guided and encouraged by parents and teachers. Parents should become acquainted with the possibilities of voice development and use under this new system, so as to encourage and guide their boys past the breakers.

The need of vocal training may be admitted, but how about the *possibility* of such training? Many of my readers may have visions of long and expensive lessons, especially if the course has to extend over a term of years, and come to the hasty conclusion that the

conditions prohibit the general application of the method. The expense may be really in inverse ratio to the value of the work. For instance, the method may be used in regular school work. The object, method, and exercises can be made simple enough to interest the boys, and enable regular teachers of even moderate musical ability to use it successfully. Or it may be used at home under the supervision of a musical member of the family. Even the amount of time required can hardly be an objection, as success will follow the earnest, intelligent use of only a few minutes daily taken as a class exercise. There will be no harm if more time is given, or, if pupils be encouraged to practise at home. When parents fully appreciate the importance of preserving the voice from breaking, they will be anxious to spend a little thought and conscious effort, and even expense, on their boys' voices. Class work is not a necessity, however; individual work will yield even better results, because the teacher can give his undivided attention to each pupil and adapt the exercises to his requirements.

There are undoubtedly some, perhaps many, who seriously question the value of training in singing, and who would, therefore, discourage systematic, or indeed any, training of the voice. "Singing is not a necessity," some say. "It is an accomplishment only." "A boy cannot use singing in his business." I would earnestly remind such that singing is a process in education, and an important educational factor withal.

Singing has a many-sided value. It is physical training, intellectual training, and emotional training. The field of the emotions is peculiarly its own. No other subject has such a general value, and none can compete with it as a means of emotional training.

The end of school music is not merely to make singers, but rather to use singing as a means to secure a kind of mental training which cannot be adequately derived from any other study. Singing itself is an incidental object; complete development of the individual is the essential object. It stimulates the emotions to activity—an indispensable condition of health and order. It exercises, regulates, or harmonizes and purifies the emotional nature, and so creates or induces a condition of emotional equilibrium or harmony. Perfect mental development is impossible without emotional culture, because the emotions are an integral part of mind. All training for symmetrical manhood and womanhood must include this natural process of training the emotional nature.

Breathing exercises properly taken enlarge the chest and increase the breath capacity, strengthen the respiratory muscles—the motor muscles of the body—and oxygenate the blood. They are the most healthful of all exercises and are absolutely necessary if we would develop or even only preserve our physical health and energy. We spend much unnecessary time and money in feeding the stomach and begrudge a few minutes' time per day at no cost to feed the lungs; yet we could live days without food for the stomach, and as a rule be healthier on one half of what we now consume, but not ten minutes could we live without food for the lungs. Probably a majority of people, sooner or later, unconsciously and seriously diminish the stock of energetic capital with which they are naturally endowed, and being too thoughtless or indifferent to replace it, become weaklings and doom themselves to early decay, mentally and physically. We surely owe it to ourselves, if not to humanity, to devote several short

periods each and every day to increase our capital account in the bank of health. Let not the man or woman who is denied the opportunity to take outdoor exercise despair of maintaining or acquiring robust physical strength.* Further, breath control, which all singers must acquire, is really muscular control, and this in turn is the medium through which we obtain nerve control, which is the basis of self-control. Thus singing, which demands thorough breathing and breath control, is an effective method of physical culture, yes, even of self-preservation, the first law of nature; and wielding a profound influence upon character and conduct.

Intellectually, singing is of much educational advantage, but less so than some other subjects. It excels on the side of discipline rather than on the side of information. There is much information to be gained in the study of vocal music, but it is not directly of advantage to any but the music user. The disciplinary effect of singing can scarcely be overestimated. Outside of self-control referred to above, there is obedience, unity of action, training of the ear, as well as association with the best literature. Music is the most refined form of mental recreation.†

It should not be forgotten that the human voice is the means by which we express our thoughts and emotions—a distinguishing feature of humanity, and as such worthy of careful training and use. A pleasant speaking voice is a valuable asset from a business standpoint. Business men have often remarked that one of the severest strains in business life is due to

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* See "Lung Culture." P. von Boeckmann, New York.

† Also see Music in its Relation to the Intellect and the Emotions. Sir John Stainer.

the coarse and discordant voices of their fellows. A pleasant voice is always regarded as a mark of refinement and culture both in men and women. It pays the business man and the professional man to have a beautiful voice.*

Some will question the advisability of adding such training to the school course on the ground that so few boys can take advantage of it. This might be a good reason if this system did not alter the whole aspect of boy voice training, as well as the relations of the boy to singing. There need be few non-singing men and fewer non-singing boys.

There is pressing need for systematic voice training—training of the singing voice and of the speaking voice; such training is easily possible, and its value is beyond question.

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* See page 12.

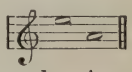
CHAPTER V.

The System.

SYSTEMATIC training of the boy's voice, as already stated, should begin in early boyhood and continue over the change of voice at least. This system is adapted for the use of boys almost as soon as they can talk. It is conveniently divided into three periods, the first of which we may call the period of childhood, in which the boy will sing soprano like the girl; his vocal conditions at this stage being similar to those of the girl. The second period we may call the period of boyhood, in which he will sing alto, not because the voice has really changed to alto, but rather because the ultimate voice condition demands that the pitch should begin to fall about this time; and the third period we may call the period of adolescence, in which he will sing tenor or bass. The first period begins about five years of age and extends to ten years; the second period extends from ten to fifteen years; and the third period extends from fifteen years upwards. These ages are approximate, of course, but this classification will be found satisfactory for ninety per cent. of boys.

We must begin our work by diligently removing the obstacles referred to in Chapter III. Too often is this preparation overlooked, with failure as the result. These obstacles, as we have seen, are defective breathing and throat tightness. The boy must be trained in correct breathing and in the proper use of his mouth and

throat in the production of vowel sounds, the breathing must be deep and thorough—correct inhalation, exhalation, and breath control. The mouth must be made round and loose. The vowel *oo* and syllable *loo* are used for this purpose. This vowel somewhat exaggerated, as in whistling, but with perfectly loose and soft lips, tends to relax the muscles of the throat and enables the boy user to obtain a round, mellow quality of tone. The use of *oo* acts as a lubricant on the throat and permits the tone to flow easily. It is used persistently and continuously for several years with the object of establishing a habit of easy tone production and good tone quality—both fundamental matters of prime importance. Given a good *oo* as a starting-point, it is comparatively easy to get good quality on other vowels.

Following the introduction of the above, and used concurrently with it, come musical exercises, first for the upper part of the voice only—between  —to secure the thin register, the boy's natural voice. When the voice has been properly caught, as it were, in the upper part, we proceed to train the thin register downwards so as to insure the use of the thin register in his whole range. The exercises are advisedly of a very simple character, are easily learnt, and prove widely effective. All the work should be done with the greatest thoroughness.

The requirements and work of the second period indicate a great advance upon the first period. The boy is now a singer, likes to sing, and appreciates to some extent his work and progress. He is now permitted to use a variety of vowels—*oo*, *oh*, *aw*, *ah*, *ai*, *ee*—always keeping *oo* as the starting-point for the

sake of easy production and round quality. His songs and exercises have now a wider range in pitch. His larynx and vocal apparatus in general acting in sympathy with the tendency towards growth in his physical system, also give signs of growth. His voice is, therefore, encouraged to fall in pitch by the use of suitable exercises; and as his throat is now in a normal condition, thanks to the breathing and vocal exercises, it responds and the pitch gradually falls. In this operation only gentle exercise is permitted. In a short time it will be noticed that the easy pitch of the voice is getting lower both in singing and in speaking. This gradual descent continues until the voice becomes an adult voice. At about fifteen years of age the boy may be classified as tenor or bass. The voice is still immature, but time and judicious training will correct that. The great achievement is this: the voice has not broken, it is preserved for future use. The later exercises aim to give him a wide, usable range. Since his voice in changing did not break, he has not, therefore, lost the lower part of his boy's voice, but continues to use it in a somewhat modified form. The chart on page 18 will give an idea of the change that has taken place in the voice. In Fig. 1 the complete male voice is shown; in Fig. 2 the boy's section only appears; in Fig. 3 the new tenor voice; and in Fig. 4 the new bass voice.

The change of physical condition is natural, and so, likewise, is the change of voice—the latter depends upon the former. The change of physical condition is slow and gradual, and the vocal change must be the same. It has long been suspected that the "break" ruins the future voice—the failure of so many singing boys to become singing men proves it—but it has been

accepted as the only possible way. It is, however, the height of folly to permit the voice to break when it can be trained down so easily. The boy may, nay, should, sing all the time the change is taking place.

The congestion that is usually present during the "break" is the result of the same strain and tension that has caused the "break." If there is no strain there will be no congestion, and no "break." There is, therefore, no more necessity of resting the voice during the process of change when correctly carried out than there is of stopping all exercise during general physical growth. Both are natural and interrelated. There is, indeed, pressing need at this stage of the boy's development for regular and judicious vocal exercise to prevent the vocal muscles from losing their flexibility and responsiveness in tone production, thus insuring an absolutely safe change.

CHAPTER VI.

Practical Experience.

The foregoing argument is based entirely upon physical phenomena and natural laws concerning growth and development. It is a deduction from the known to the unknown—from the known, though somewhat obscure, physical conditions, to the unknown possibilities of the male voice. In short, it is an appeal to common-sense. The author believes that he has made his point without any reference to practical experience, i.e., actual results obtained by training. "If it is not true, it ought to be," have said many interested observers, "because it is reasonable." As there are possibly many who, like Thomas, will not believe without a closer contact with actual results, the following testimony is added:

REPORT ON THE TRAINING OF BOYS' VOICES.

[From Report of Board of Education, Montclair, N. J., 1900–1901.]

To the Superintendent of Public Schools.

SIR: In response to your request for a report on the special training of boys' voices in the public schools under your charge, I have much pleasure in submitting the following:

The break of the boy's voice at puberty is a serious

matter to the boy. The voice must change even as he himself must change from boyhood to manhood, and the "break" has been accepted from time immemorial as the necessary process of change. The "break" means the utter collapse of the voice—it becomes a mass of débris, and in many cases is utterly ruined.

A large majority of boys abuse their voices by loud talking, shouting, and loud laughing. This violent use of the voice, which strains the delicate apparatus, generally becomes habitual; when the boy would get away from it he cannot. He has unconsciously acquired a habit of wrong voice production, his vocal muscles are strained and stiff. This condition is directly opposed to correct tone production, and the result is that he not only cannot sing, but also frequently uses his voice in a defective manner in speaking. This straining, persisted in year after year, growing more severe still as the larynx grows larger and the boy maintains the same pitch of voice, causes the "break" and the accompanying congestion in the throat. The breaking of the voice leaves a defective foundation for the future man's voice, as he must use the same throat, the same cords, the same muscles, as those used and abused by the boy. Can we wonder that good men's voices are so rare? Defective breathing also helps to put an unnecessary strain upon the vocal muscles, and it is surprising how many little children are unable to breathe properly.

In my judgment the "break" of the voice is unnatural and my experience has taught me that it is unnecessary. It can be avoided by proper training. The man's voice is about an octave lower in pitch than the boy's, and as the boy grows gradually into the man

what more reasonable than that the boy's voice should grow gradually into the man's voice? The boy, however, has acquired such a persistent voice habit that the pitch cannot fall without help. This help may and should be given in the class-room.

Seven years ago we introduced into all grades below the High School, breathing and vocal exercises to correct these habits. Naturally the best work was done in the primary grades. We have succeeded in reducing the non-singers to a very small number, so few indeed that there are few rooms between third grade and sixth, inclusive, in which there are children who cannot stand before the class and sing alone. The pupils who cannot sing either attend irregularly, are unwilling to try, have throat trouble, or have come from schools where singing, if used at all, was not obligatory. We have also tried to give the children all the fundamentals of correct voice use. The result of the primary work gradually reached the grammar grades and improved the conditions there. This work, however, was not sufficient for the older boys. A smaller number of voices broke than formerly, but an additional form of drill was necessary to complete the work.

NOTE.—Up to this point all the vocal training is given to boys and girls alike, and with much advantage to the latter.

Three years ago we began to give special vocal exercises to our boys of the sixth, seventh, and eighth grades. These exercises were intended and in every respect were adapted to encourage the voice to fall in pitch. They were simple in tonal and rhythmic content, and easy in range. The time devoted to this work was very short, probably not more than five min-

utes per week—perhaps even less. The boys were told the object of the exercises, and took an interest in them, but probably not to the extent of inducing any home practice. The boys who were then at the beginning of the seventh grade are now finishing the ninth-grade work. About fifty boys have gone through the work of these three years, with the result that about ninety-five per cent. changed to tenor or bass. The great majority of the boys with changed voices are singing tenor. Their voices lack the strength of adult voices, but that will come as the boys mature into manhood. Their range was from D, third bass line, to C, third treble space—almost two octaves. It is not expected that all these boys will become permanent tenors; some may go down lower and broaden out into baritones and basses. But now that the throat has been released from its muscular bondage this matter may be safely left to take care of itself. Whatever they become ultimately, they have been saved the "break," and their voices are natural and uninjured. This training was given to all sixth-, seventh-, and eighth-grade boys except those—a small number—who sing soprano in boy choirs, and who are excused at the wish of the choirmasters. There has been no cessation from singing, no throat congestion, none of the usual hoarseness and huskiness so common to this period. The ninth grade has received most attention because the boys of that grade are calculated to show a higher state of development than those one year younger. The eighth-grade boys give promise of doing as well next year. They are now singing a low alto. Another interesting fact which may be mentioned here is, that the speaking voice also goes down in pitch gradually and becomes more manly in character. This

change comes upon the boy so gradually that he scarcely notices it.

From the beginning of school life up to the sixth grade the boys have been on the same footing as the girls. In the first three years they have sung treble entirely; in the following two years they have had two-part music, sometimes taking the upper part and sometimes the lower. Even at the end of the seventh grade, after two years of second- and third-part singing, most of the boys are able to sing an excellent soprano, though rarely called upon to do so. The voice drops very slowly at first on account of the severe throat tension; as soon as that tension is relaxed, the pitch goes down more rapidly. The range extension in the lower part of the voice seems to be more rapid than the range contraction in the upper part.

The most critical time of all is the ninth grade and first two years of High School, and I cannot but regret that so little time can be spared in the ninth grade, and that the time allowed for music in the High School precludes the possibility of giving any time to the boys' voices. I do not doubt that this subject some day will claim and receive more generous treatment at the hands of educators and the general public.

Respectfully submitted,

JOHN J. DAWSON,
Instructor in Vocal Music.

The following reference to this subject is made on page 47 of the same report:

VOCAL MUSIC.

"I desire to call attention to the report of Dr. Dawson, printed on another page, on the work in voice

training. The description of the method by which the 'break' in a boy's voice at a certain period of life can be avoided raises a very interesting and important subject.

"At the date of this writing, three weeks after the opening of the new year, Dr. Dawson reports that all the boys of the first-year High School are singing bass or tenor in the chorus. In spite of the abuse of the voice, in which many boys will indulge, the voices are found to be at present in surprisingly good condition. Only a small number, probably less than ten per cent. of the whole, show signs of breaking. There is hope that even in these cases the difficulty will succumb to right training."

The above report refers almost entirely to the ninth-grade boys of last year. Some reference to this year's ninth grade will be interesting. The following matter is extracted from a report sent to the superintendent on December 14, 1901: "The work done by the present ninth grade is very satisfactory. More difficult and ambitious music has frequently been sung, but by the girls chiefly. The music so far is simple, but it is sung with such unanimity as to create some enthusiasm among the pupils. The boys are confident and courageous in the use of their voices, and this has contributed largely to the creation of a unanimous sentiment in favor of the singing, which is an entirely new thing to us at this stage. In time this ability with its accompanying enthusiasm must leaven the work of the High-school chorus. Of the one hundred and twenty pupils in the ninth grade only *three* are excused from the singing lesson—two boys and one girl. . . . So great is their (the boys') confidence and interest

that they are even willing to sing alone, not one but all, in the presence of their classmates.

"The new voice development is progressing most satisfactorily. I examined every boy individually on November 8, and failed to find even one voice giving the slightest signs of breaking. All the boys are singing tenor or bass." It may be added that these boys average from fourteen to fifteen years of age, and have had one year more of training than the boys of last year's class, as they began at the same time one grade below.

Thus does practical experience seem to confirm the conclusions of common-sense.

CHAPTER VII.

Prospective Results.

THE services of a prophet are not required to foretell that the change of method outlined herein must produce a revolution in the use of the male voice. This voice so long bound by antiquated shackles will emerge from the darkness of bygone ages into the light of this, the scientific age, able to compete on even terms with the more favored female voice. Once these artificial obstacles are removed, boys will sing with as much facility as girls, and men with as much facility as women. It will give a marvellous stimulus to the use of the human voice, both in singing and speaking, for the improvement in the singing method cannot fail to have a beneficial effect upon the speaking voice. But let us examine the matter more in detail.

In the elementary school much time and energy will be saved because the formidable obstacle of non-singing boys will be removed. This time will be left free to secure better results in singing and music reading. The enthusiasm created by a unanimous favorable sentiment of both boys and girls toward the singing lesson—a point of vantage so rarely obtained now—will act as a wonderful stimulus. Union is strength in the singing lesson as elsewhere.

In the High School, too, good singing may easily be obtained under a judicious management. If it is a

mixed High School, the girls will naturally sing the soprano and alto, a few of the younger boys with voices still unchanged will also sing alto, while the older boys will sing tenor and bass. This will arouse a natural enthusiasm that will soon carry the work beyond the present commonplace level into classical music in which all the school may participate. In the boys' High School equally good results may be obtained in the study of music arranged for equal male voices, of which there is a large quantity written by excellent composers.

Singing is often neglected in boys' private schools; some do not attempt it at all, and others use it in a very elementary fashion and with unsatisfactory results. The management of boys' schools can hardly be blamed for this, as they have merely accepted the popular belief that time spent in teaching boys to sing is only time wasted. The new treatment alters all this, however, and now even boys' private schools may have a successful singing department. This is particularly true if the school contains both an elementary and an academic department, as the older boys would take the bass and tenor parts, and the younger the soprano and alto. Under ordinarily favorable conditions, a school of this kind should, after several years, produce and maintain a high-grade chorus of boy voices. It is really surprising how few boys cannot learn to sing, and how few do not wish in their innermost hearts to sing.

This line of thought should be extended to the colleges even, where musical instruction is rarely provided except for a talented few. Singing properly belongs to the college course as one of the humanities, for certain it is no other subject can claim to affect our

human nature and discipline it generally as does singing. What magnificent work would be accomplished in the college if singing could be carried on in this way, and what a physical, intellectual, and emotional exercise it would prove for the busy students! The most refined of all recreations! Why should not the college yell be set to music and sung instead of being bellowed?

The singing of the Sunday-school would also be improved; part singing would become possible, thus doing away with much, if not all, of the present evil.

Real congregational singing would be within easy reach. It is a well-known fact that in churches where the people are supposed to take part in the singing male voices are conspicuous by their absence. Add more male voices in tenor and bass parts to the volume and more female voices will be encouraged to sing. Good singing requires enthusiasm, and enthusiasm is dependent upon unanimity. If all sing, the result will grow to be good and enjoyable. If only a small part sing, the result will be dull and tiresome. When there is a real vocal ability there will also be a desire to read music, and even a large congregation may become as proficient as a well-trained chorus. It has long been recognized that good singing draws a large congregation. This is often true where the choir takes the entire singing. But it would be found to be true to a much greater extent if the congregation, with a real musical ability and true enthusiasm, took its proper part in the singing. Who was it said "a singing church is a live church, and a non-singing church is a dead church"? There are, unfortunately, a great many dead churches; we find them in every community. The term "singing church" properly applies

to those places which have enthusiastic congregational singing.

There would also be a change in the boy choir. The system herein proposed will be condemned in all likelihood by choirmasters and adherents of the present system of boy-choir training, because it is proposed to shorten the period during which a boy may sing the soprano part. True, at first sight there seems to be a loss of time, but a careful investigation will show that the change will be beneficial to the boy as well as to the choirmaster and the church service. Even though the benefit was in favor of the boy alone, one would feel amply justified in calling a halt to a system that does not hesitate to sacrifice the beautiful and promising voices of so many boys to carry out a feature that is not absolutely necessary. Suppose a boy enters a choir at seven or eight years of age; by the time he is nine he should be in good training to sing the soprano part. About eleven the choirmaster should begin to coax his voice downward, though he may still sing soprano until about twelve or twelve and a half years of age. Then he should begin to sing the alto part, and by the time he is fifteen he should be ready to sing a light tenor or bass which will gradually mature into a man's voice, and without stopping his singing at any stage. At eighteen years of age his tenor or bass, or maybe baritone, voice will be in better condition for present and future use than most of the voices doing duty in the adult section of many choirs. As a result of this training the choirmaster would soon have an adult department well trained in the service of the church, and a natural school from which he could continually recruit his adult department. Surely this would be a gain to every one concerned.

Music in the home, in the social circle, and in the musical society would receive a great impetus from the use of this method, which saves the male voice from destruction in boyhood. And last but not least, there would be a great improvement in the speaking voice both of the boy and the man. Instead of the usual unintelligible growl and snarl or high-pitched bark we would have musical speech, not speech set to music, but voices of such rich quality and flexibility that "musical" would be the most appropriate term to apply to them.

Conclusion.

The author has stated his case and is satisfied to put this little work into the hands of the public, regretting that he does not possess the facile power of a Spencer or Huxley in presenting scientific facts. The presentation of such a combination as common-sense and experience herein forms an irresistible argument and may make the deficiency less felt. Notwithstanding overwhelming evidence there will be objectors. "It is contrary to the traditions." "The great weight of experience is in favor of the old system." "All the literature on the boy's voice ignores this idea." "Surely, if this is true it would have been discovered long ago."

But all this proves nothing except that this is a new idea. It is only the natural recoil of the conservative mind. New ideas have often been vigorously condemned and ridiculed. That it has not been brought forward before is not a serious objection either. Centuries of civilization preceded the discovery of the circulation of the blood by Harvey; of the facts of the solar system by Copernicus; of the principle of gravitation by Newton; of the steam-engine by Watt; of the locomotive by Stephenson; of the electric telegraph by Morse; of the telephone by Bell; of the phonograph by Edison; and thousands of others. The author feels happy to be in such good company, and confidently expects a favorable verdict, not from future generations merely, but from his immediate contemporaries.

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